

City of Oregon City



Molalla Avenue Boulevard and Bikeway Improvements Plan

Safety and Enhancement Plan May 2001

ADOPTED by Oregon City Commission,
October 17, 2001 by Resolution No. 01-34



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

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TECHNICAL MEMORANDUM
Molalla Avenue Bikeway and Boulevard Improvements Plan
Corridor Safety and Enhancement Plan

Date: May 1, 2001 **Project #:** 4054

To: **Sharron Zimmerman, P.E.**
City of Oregon City

From: John Ringert, P.E., Marc Butorac, P.E., and Sonia Hennum

cc: Bob Wallis, P.E., Wallis Engineering
Mike O'Brien, Greenworks

The City of Oregon City initiated the Molalla Avenue Bikeway and Boulevard Improvements Plan in the spring of 2000 with the goal of creating a corridor plan to guide the management and development of the roadway facility and the surrounding land use and transportation systems. In supplement to this study, the City has recognized the importance of outlining both short- and long-term solutions to identified accessibility and mobility issues along the corridor in order to provide for the safe and efficient movement of people and goods throughout the corridor. As such, Kittelson & Associates, Inc. has prepared the following technical memorandum in order to document a recommended Corridor Safety and Enhancement Plan for the study corridor of Molalla Avenue, between 7th Street and Highway 213, in Oregon City, Oregon.

The focus of this memorandum is to identify opportunities for improving the transportation and land use access system along Molalla Avenue. Throughout the development of the Molalla Avenue Bikeway and Boulevard Improvements Plan several improvement alternatives were developed and evaluated in order to address safety, operational, mobility, and accessibility issues along the corridor. The key design, planning, and operational opportunities addressed in this memorandum include:

- Reducing vehicular conflict points along Molalla Avenue and its intersecting access locations (both public and private);
- Improving access along the Molalla Avenue corridor to provide safe and efficient operations for all travel modes throughout the corridor; and
- Developing viable, efficient on-site and adjacent corridor circulation patterns consistent with and complementary to the proposed goals and objectives of the Molalla Avenue Bikeway and Boulevard Improvements Plan.

THE ACCESS MANAGEMENT CONCEPT

Access management is a means of preserving the function of an arterial system and other transportation systems by building good design practices into land access and facility design or, as in the case of Molalla Avenue, redesign. Arterial streets are often the primary means for inter- and intra-city travel by car and truck, and are the prime components of a community's roadway system. Development, however, tends to load local traffic onto these facilities, which can degrade their primary functions of safety and mobility. Access management is the primary tool for preserving both the arterial function and providing safe access for adjacent development. At the core of the access management concept is a design and policy philosophy for roadway management, intertwined with a consistent land use policy, intended to provide and preserve safety and mobility.

Access management and enhancement concentrates on minimizing the number of direct access points to major surface streets while still providing reasonable and effective indirect access to properties. Key components of successful access management implementation include effectively designing driveways and enforcing safe and efficient spacing and location of driveways. A variety of techniques can be used in order to achieve access efficiency, including: geometric design considerations (i.e., medians, islands, channelization) that prohibit certain movements, consolidation of access points (i.e., joint/shared driveways, cross-over easements), and the provision of auxiliary lanes for turning movements. Such improvements, when implemented correctly, can provide significant benefit for smoother vehicle flow, reduced travel delay, and fewer crashes and other safety incidents. These benefits lead in turn to advantages such as reducing road users travel time, fuel consumption, property damage, and personal injury.

Facilities with raised medians are shown to have lower accident rates than facilities without this type of treatment. However, with medians some traffic must take more circuitous routes to get to desired destinations, thereby increasing Vehicle Miles Traveled (VMT) on the system and creating the possibility for other operational issues either on or off the primary transportation system. There is also the possibility that a portion of traffic stops going to certain destinations and reroutes to others (i.e., drivers go to other businesses of the same nature that are now relatively easier to reach). This, of course, is a major concern for business and property owners along the arterial roadway on which access management strategies are being proposed. These concerns and issues must be carefully evaluated, and weighed against possible benefits, when access management opportunities are being considered.

The ability to manage access effectively is often dependent on how developed an area is when access management and enhancement action is taken and new access policies are implemented. If access management is considered at the initial planning stages, before significant development has occurred, there exists the greatest potential and opportunity for results. In more established or built-out areas, such as Molalla Avenue, where little or no previous consideration has been given to access planning along the corridor, a strategy must be developed that "retrofits" the existing roadway and access configuration to a plan that meets the community's goals and visions for that facility. This process typically occurs by modifying the access to individual and joint properties as they change land use and/or redevelop, or jointly to a number of parcels with a major roadway reconstruction project. If access changes occur with redevelopment, the strategies and approaches available are often constrained by limited site frontage and depth, and the lack of space for joint and/or shared access points.

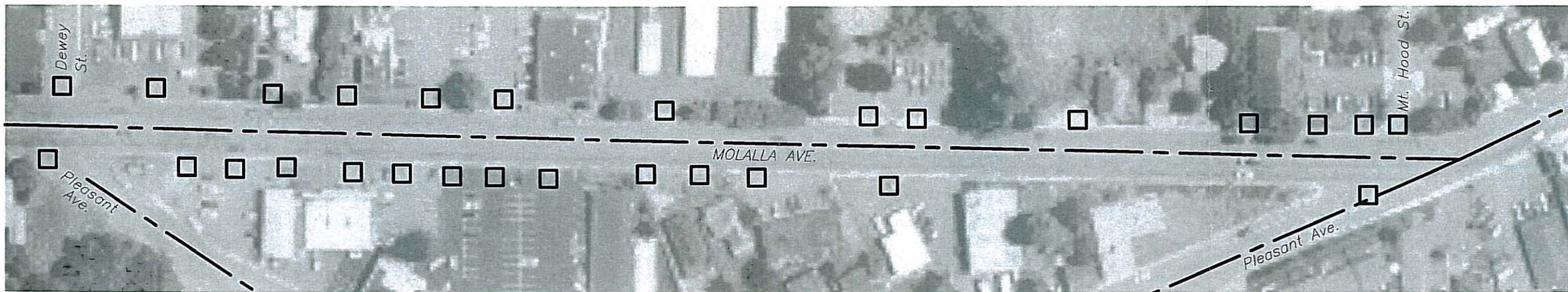
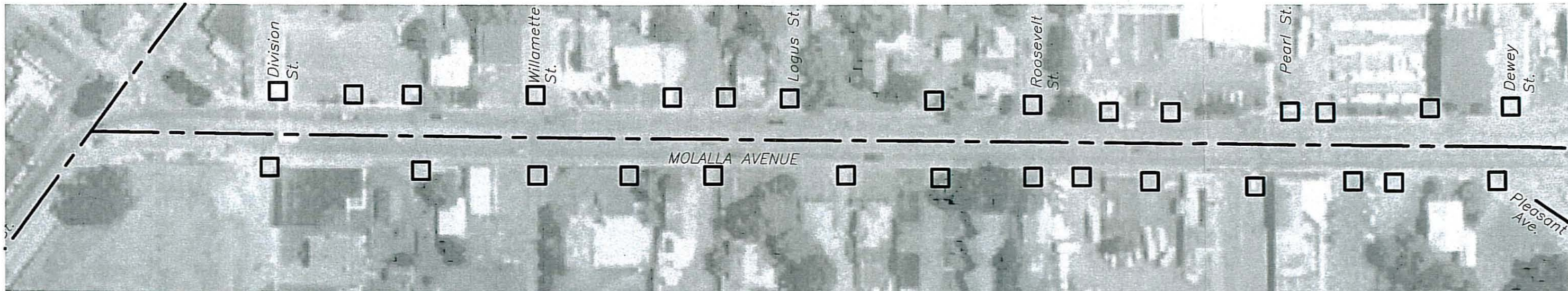
Specifically in the case of Molalla Avenue, the access management and enhancement policies implemented must complement the livability and streetscape vision for the corridor, such as fostering a pedestrian and bicycle friendly environment and encouraging the development of an economically viable, main street-oriented atmosphere.

EXISTING CORRIDOR ACCESS CONFIGURATION

Under existing conditions, the access configuration along the Molalla Avenue corridor consists of a proliferation of unevenly spaced driveway approaches. This is the result of piecemeal development patterns over the last 50 years, in the absence of any corridor or overall access enhancement plan for the facility. The large number of varying access approaches, in conjunction with growing traffic volumes along the corridor, impacts the overall mobility and operational safety of Molalla Avenue. This existing environment makes access to and from facilities and adjacent land uses difficult, reducing the potential roadway capacity, and impeding traffic operations throughout the corridor. Consequently, motorists are faced with a high potential for encountering conflicting turning vehicles, pedestrians, bicycles, and other roadway users. The frequent, poorly delineated, and inconsistent access spacing along the corridor also provides increased opportunity for conflicts with pedestrians and bicyclists.

The location of existing private driveway and public access locations along Molalla Avenue were surveyed on a parcel-by-parcel basis. Figures 1A through 1E highlight the existing driveway and intersection approaches and access points along the extent of the Molalla Avenue study corridor. As shown in the figures, in many locations the existing access configuration along the corridor provides multiple access points and curb cuts for a single property. The existing access evaluation also revealed that in certain instances there is relatively little delineation identifying approaches to Molalla Avenue.

Currently, the City of Oregon City does not have an official access management or access spacing policy. However, the City is currently in the process of adopting a policy on Street Design Standards that includes provisions outlining Access Management Standards.



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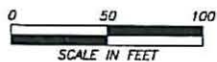
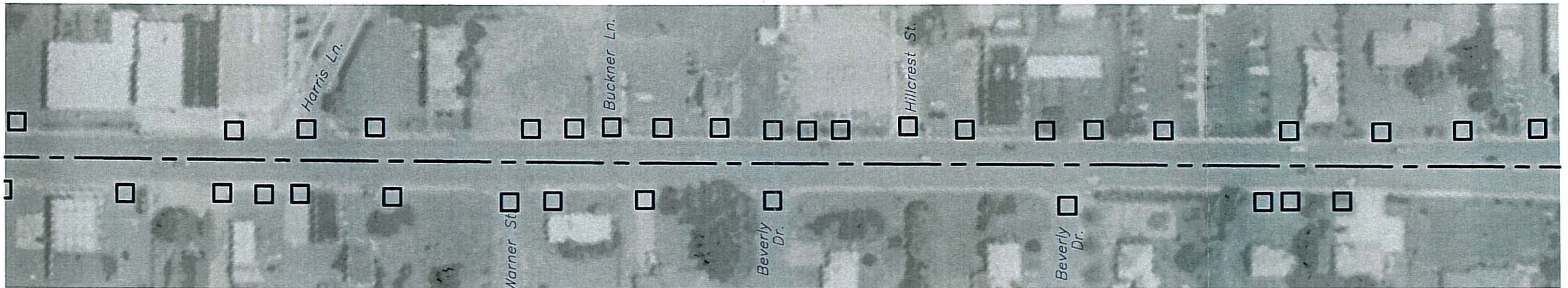
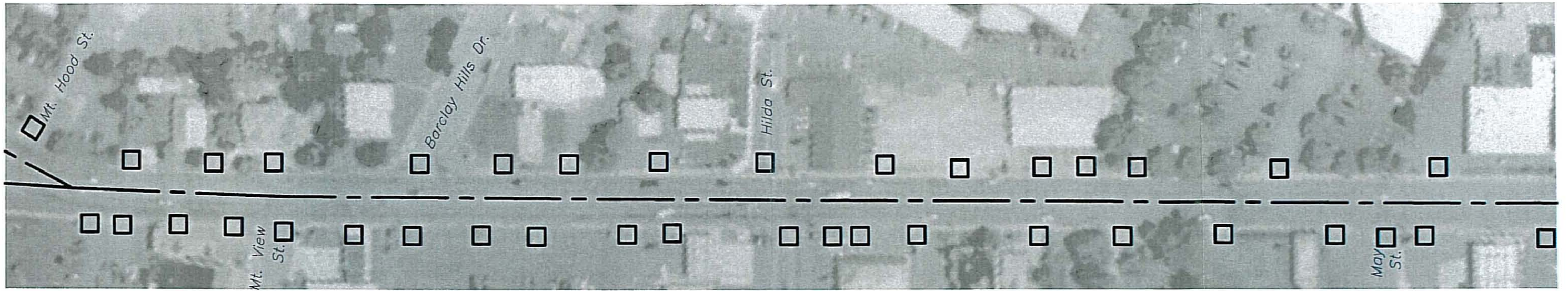
Existing
Access
Locations

Figure Number

1-A

Project Number

1077A



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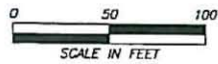
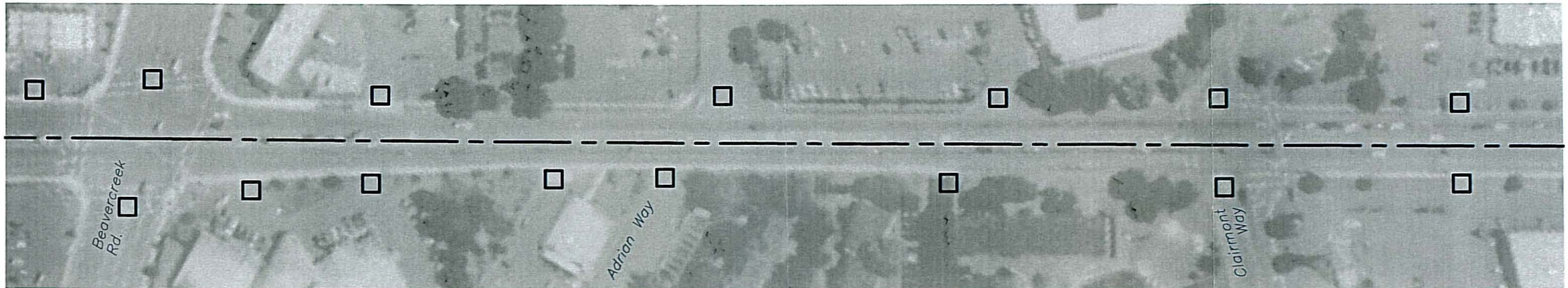
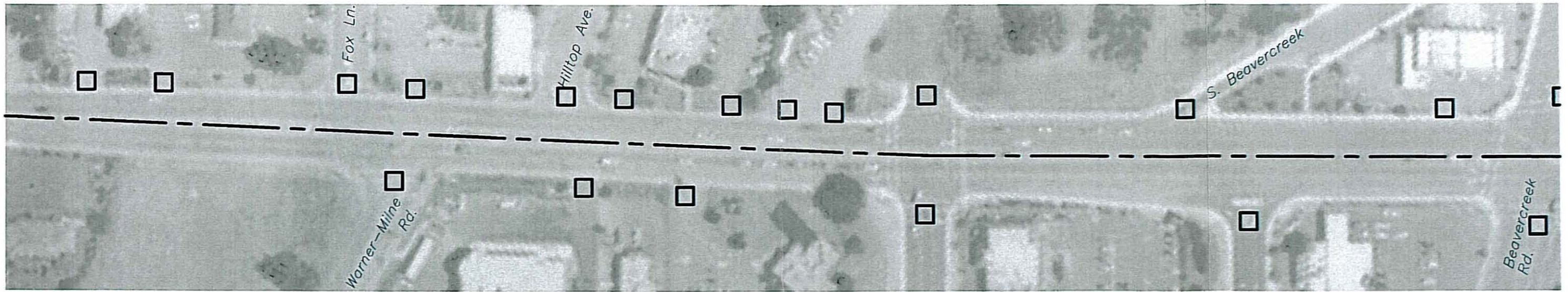
Existing
Access
Locations

Figure Number

1-B

Project Number

1077A



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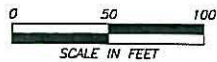
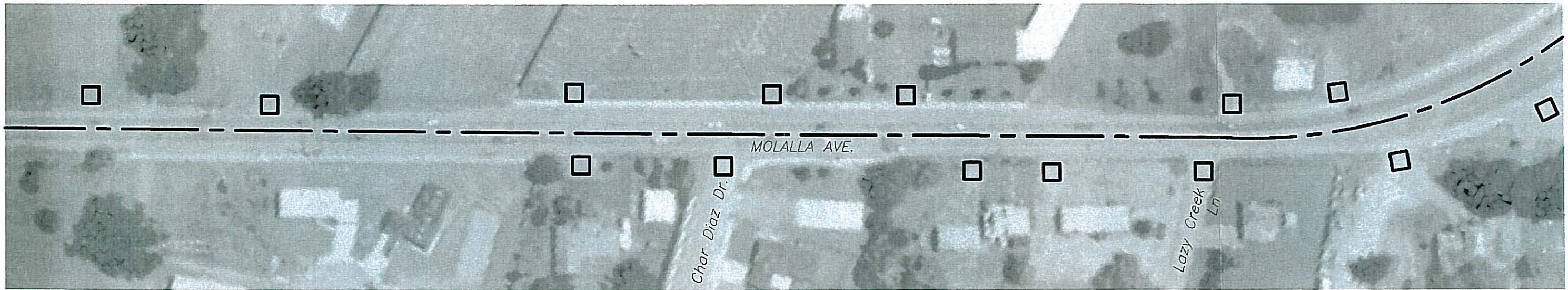
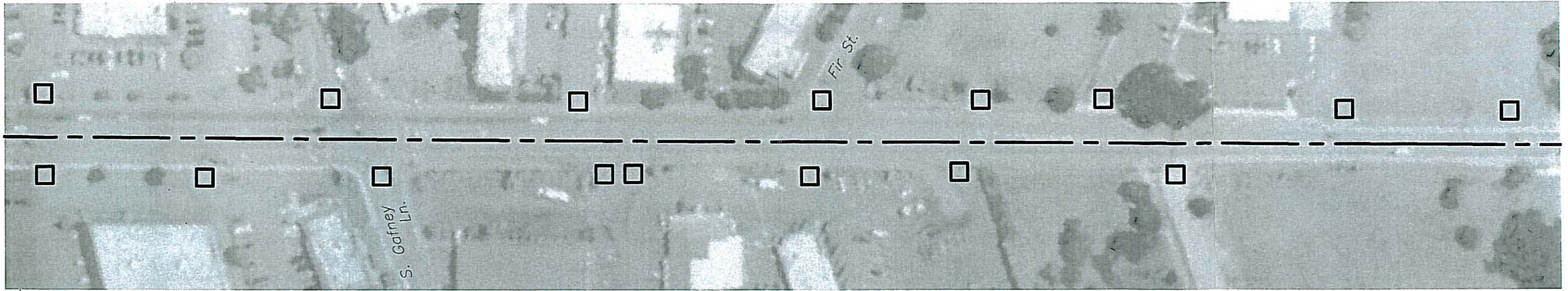
Existing
Access
Locations

Figure Number

1-C

Project Number

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Molalla Avenue Improvement Project
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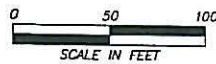
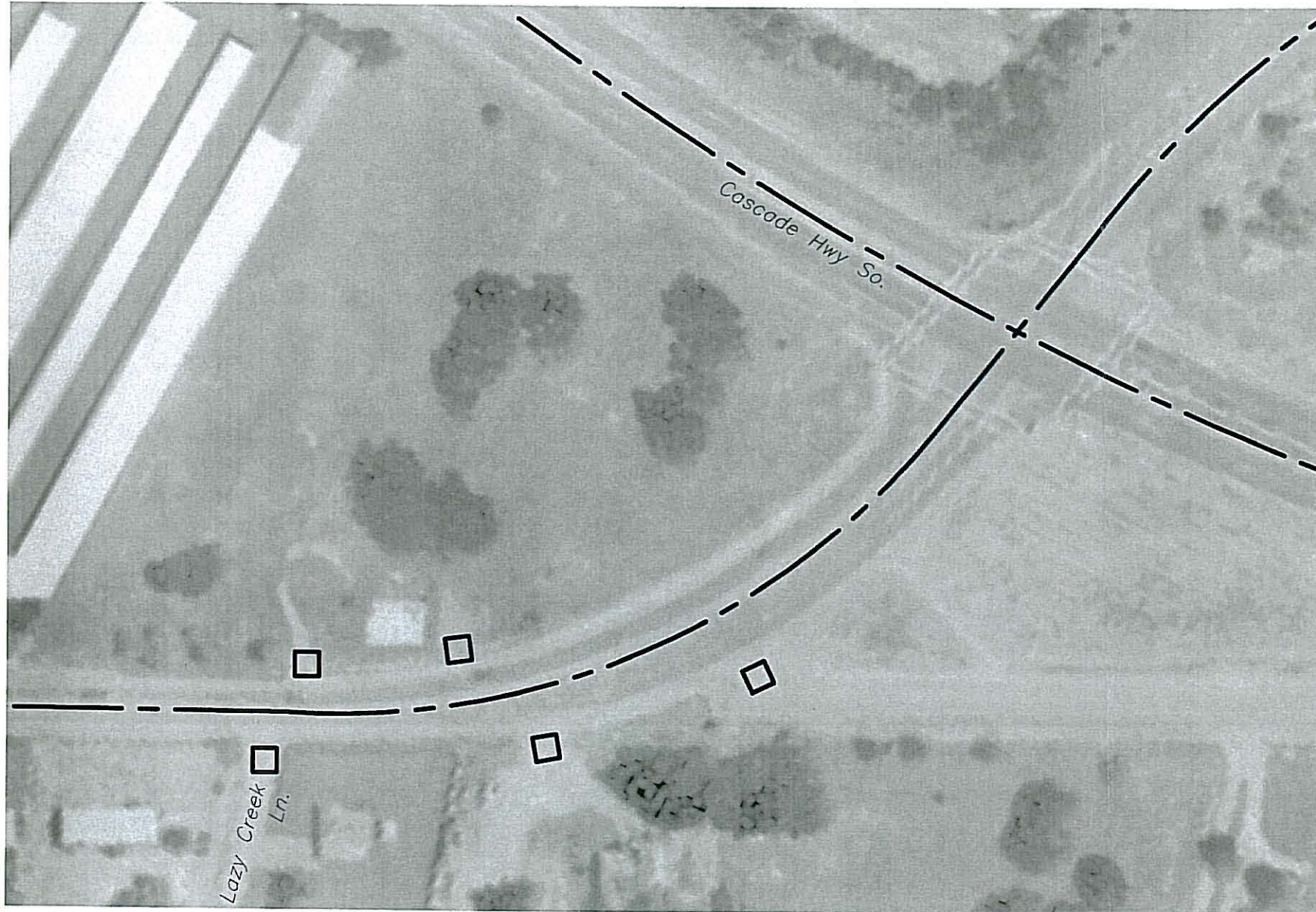
Existing
Access
Locations

Figure Number

1-D

Project Number

1077A



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Existing
Access
Locations

Figure Number

1-E

Project Number

1077A

CORRIDOR SAFETY ENHANCEMENT PLAN

The existing configuration of access points along Molalla Avenue does not adequately provide a safe and efficient environment in which safety, mobility, and accessibility are balanced. The proposed geometric and streetscape improvements identified in the Molalla Avenue Bikeway and Boulevard Improvements Plan will enhance the roadway, pedestrian space, streetscape environment, and adjacent properties by providing curbs, bicycle lanes, wider pedestrian ways, and landscaping treatments. From an operational and safety perspective, it is also necessary to properly manage the location and operation of both the public and private access approaches along the roadway in order to minimize turning movement conflicts between adjacent and opposing points of access, and between vehicular, pedestrian, and bicycle movements. Driveways and local street access points should be placed appropriately to limit potential conflicting turning movements, weaving maneuvers over short distances, and to provide for safe and efficient on-site circulation.

As Oregon City develops along with the greater Portland Metropolitan area, the community will rely more heavily upon a variety of travel modes as congestion increases. As such, it will become increasingly important to manage access on both the existing and future roadway system as new development and redevelopment occurs. Based on these parameters, an access management safety and enhancement plan for the Molalla Avenue corridor was developed to highlight opportunities for accessibility and mobility improvements along the facility. The focus of the access plan was to provide an enhanced and efficient access configuration along the extent of the Molalla Avenue corridor that serves to maximize the vehicular, pedestrian, and bicycle capacity; prioritizes the safety of all roadway users; develops and fosters the desired aesthetic, land-use/transportation system vision for the corridor; and ensures efficient and viable access for all property owners. The access plan was developed through a series of field reconnaissance visits and meetings with City Staff.

The assessment of viable access improvements and enhancements were developed based on the constraints and opportunities associated with the existing land uses and transportation system in the corridor. They represent a best effort in developing a safe and efficient access management plan that strives to achieve the community goals for Molalla Avenue, while recognizing the existing constraints along the corridor. The intent of the access plan was to define access refinement opportunities in order to minimize conflict points, preserve the capacity of the roadway, and maintain accessibility to adjacent land uses. In addition, the proposed access enhancement opportunities described in the following sections attempt to balance property accessibility and roadway mobility, and are designed to promote efficient on-site circulation patterns.

The access management and safety enhancement plan presented in this report attempts to achieve a compromise between the issues of mobility for all roadway users (vehicles, pedestrians, and bicyclists) and accessibility for local property owners. Key issues of the proposed access efficiency and enhancement plan include:

- Reducing potential conflict points along the roadway facility,
- Eliminating redundant and/or unused access points,
- Improving on-site circulation patterns for adjacent properties and land uses, and

- Achieving a balance between accessibility to local land uses, roadway safety, and roadway mobility.

The proposed access management and safety enhancement opportunities are designed to promote efficient access spacing and effective on-site circulation patterns. The proposed access management and enhancement opportunities can be qualified into three categories:

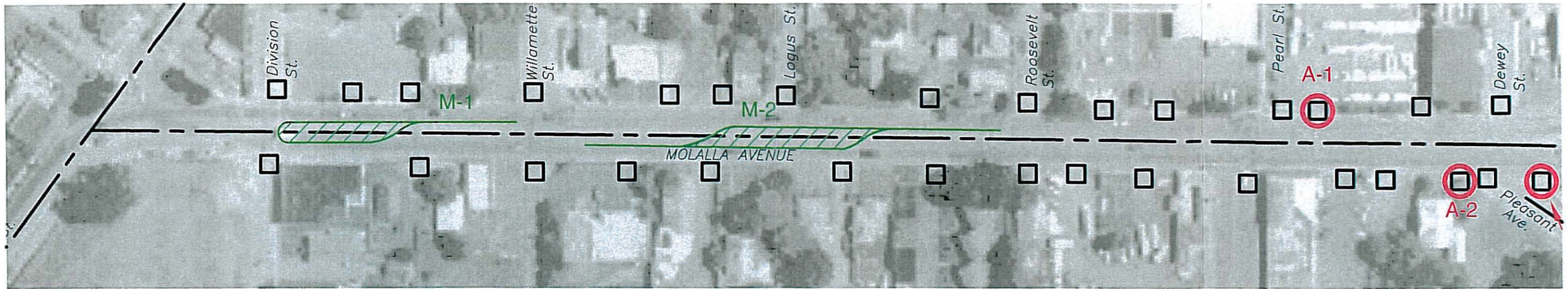
- Potential driveway closures or access modifications,
- Median treatments, and
- System-wide circulation improvements.

The specific access management and enhancement opportunities identified under each of these categories are outlined and described in the following sections. Figures 2A through 2E and Figure 3 graphically present the proposed access management and enhancement opportunities identified as part of this plan.

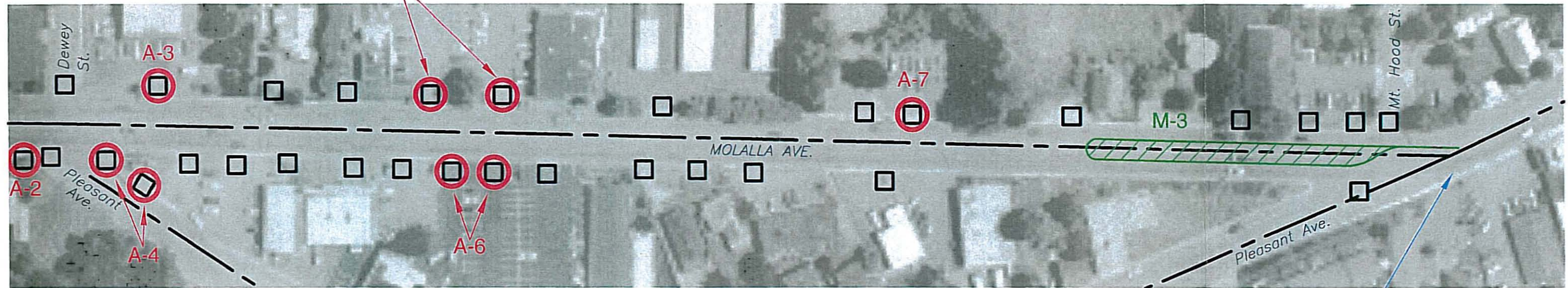
Potential Access Closure, Consolidation, and/or Modification Opportunities

The Molalla Avenue Corridor Safety and Enhancement Plan identified opportunities to potentially eliminate and/or consolidate the following private access points on the corridor. With each access location identified, a description of the justification for the driveway closure/consolidation and the identified means of alternative access to and from the subject land parcel are also outlined. The access closures, consolidations, and modifications are identified by a red circle in Figures 2A through 2E.

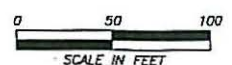
- A-1. Astro Systems (311 Molalla Avenue, Tax Lot 22E32CC03100) – remove unused (fenced off) curb cut on the east side of Molalla Avenue (just south of Pearl Street). Alternative access for the property is currently provided from Pearl Street.
- A-2. Private Residence (302 Molalla Avenue, Tax Lot 22E32CC03400) – remove redundant (southern-most) curb cut on the west side of Molalla Avenue (just north of Pleasant Avenue). The property already has one access point onto Molalla Avenue.
- A-3. Salvage Yard (405 Molalla Avenue, Tax Lot 22E32CC02000) – remove redundant (northern-most) curb cut on the east side of Molalla Avenue (just south of Dewey Street). The property has alternative access off of Dewey Street.
- A-4. Rainbow Finishes (407 Pleasant Avenue, Tax Lot 22E32CC08000) – remove redundant (northern-most) curb cut on the west side of Molalla Avenue (just south of Pleasant Avenue) and the curb cut (northern-most) on Pleasant Avenue (just west of Molalla Avenue). The parcel already has additional access points onto Molalla Avenue and Pleasant Avenue. By removing these two curb cuts, the property's parking lot can be reconfigured to provide more parking spaces and a more efficient on-site circulation pattern.
- A-5. Taco Time and Tacho's Mexican Restaurants (503 Molalla Avenue, Tax Lot 22E32CC08600 and 515 Molalla Avenue, Tax Lot 22E32CC08903) – consolidate two existing curb cuts into one shared access point. It should be noted that on-site parking is already shared between these two parcels.



A-5: CONSOLIDATE TO ONE ACCESS



PROHIBIT LEFT-OUT AT PLEASANT AVENUE



| LEGEND | |
|--------|---|
| | EXISTING ACCESS LOCATION |
| | PROPOSED ACCESS CLOSURE AND/OR MODIFICATION |
| | PROPOSED MEDIAN TREATMENT |
| TEXT → | SYSTEM WIDE CIRCULATION IMPROVEMENT |



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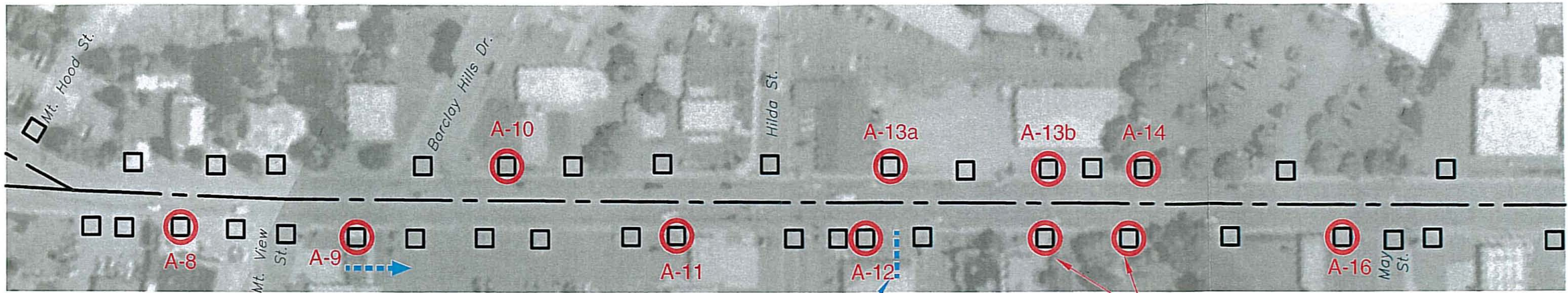
Corridor Safety and Enhancement Plan

Figure Number

2-A

Project Number

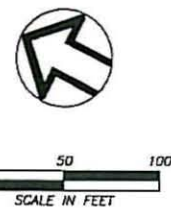
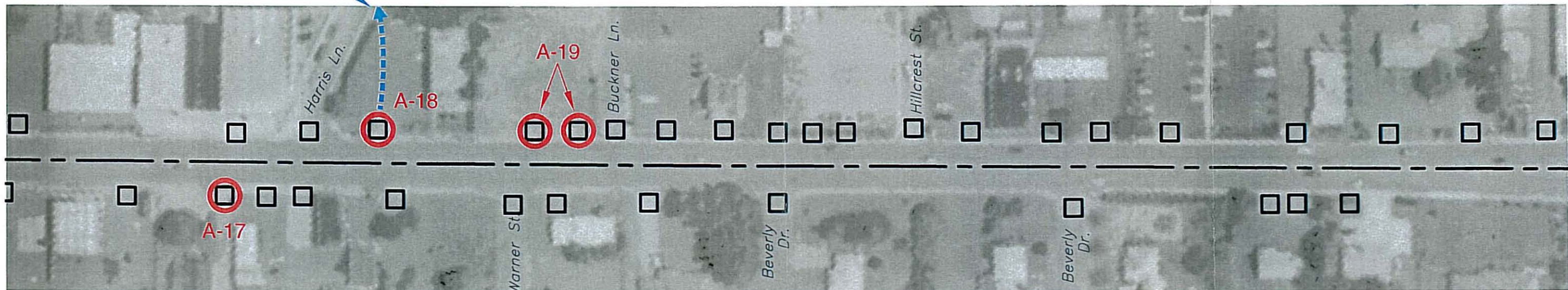
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ALTERNATE ACCESS FROM HARRIS LANE

C-1: REMOVE PARKING BLOCK

A-15: CONSOLIDATE TO ONE ACCESS



| LEGEND | |
|---|---|
|  | EXISTING ACCESS LOCATION |
|  | PROPOSED ACCESS CLOSURE AND/OR MODIFICATION |
|  | PROPOSED MEDIAN TREATMENT |
| TEXT → | SYSTEM WIDE CIRCULATION IMPROVEMENT |

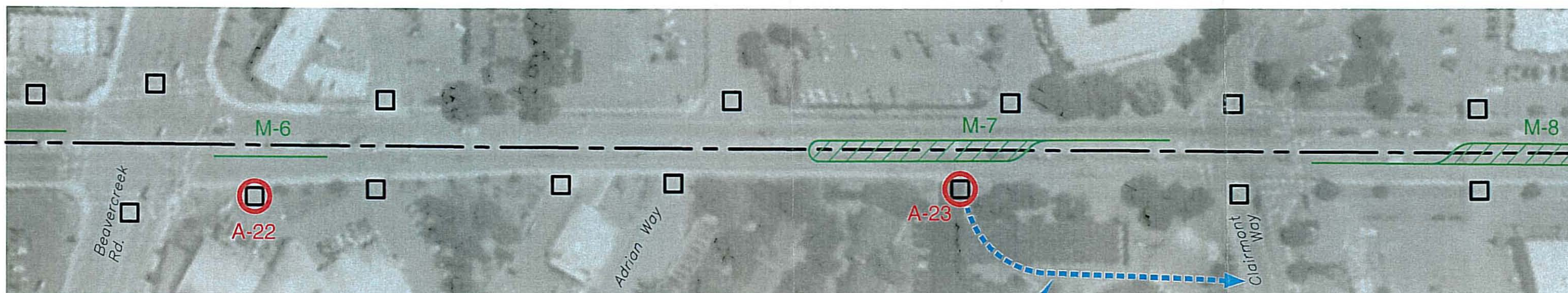
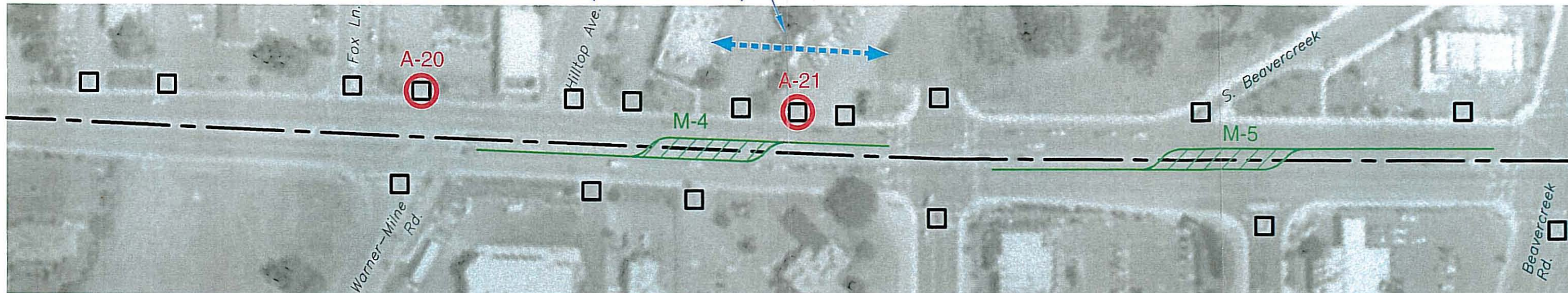


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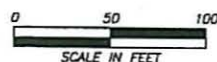
Corridor Safety and Enhancement Plan

Figure Number
2-B
Project Number
1077A

POTENTIAL CROSSOVER EASEMENTS AND CONSOLIDATION (SEE FIGURE 3)



C-3: REMOVE FENCE AND PROVIDE ALTERNATIVE ACCESS FROM CLAIRMONT WAY



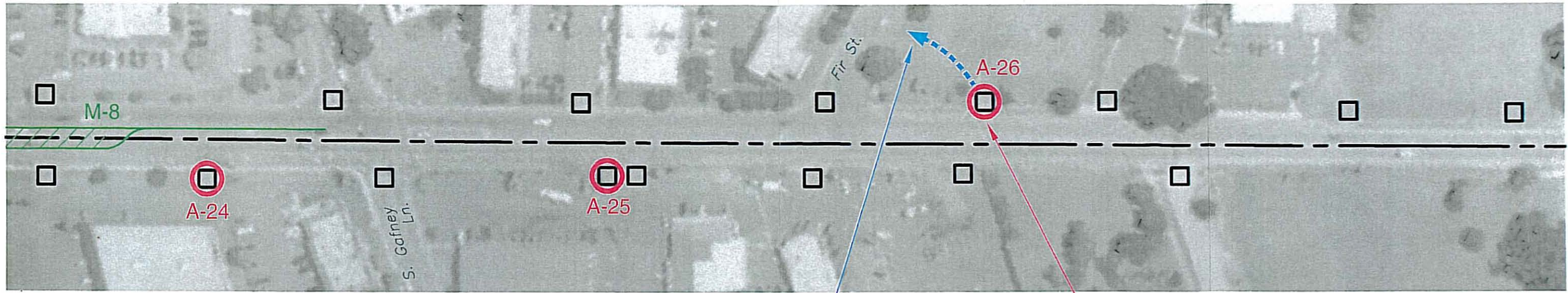
| LEGEND | |
|--------|---|
| | EXISTING ACCESS LOCATION |
| | PROPOSED ACCESS CLOSURE AND/OR MODIFICATION |
| | PROPOSED MEDIAN TREATMENT |
| TEXT → | SYSTEM WIDE CIRCULATION IMPROVEMENT |



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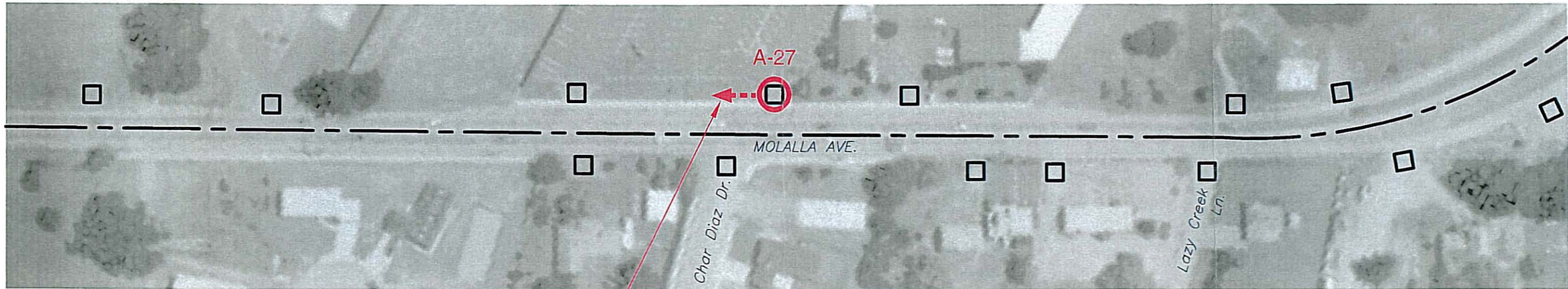
Corridor Safety and Enhancement Plan

Figure Number
2-C
Project Number
1077A



ALTERNATE ACCESS FROM FIR STREET

CONSOLIDATE ACCESS WITH ADJACENT PROPERTY



REALIGN ACROSS FROM CHAR DIAZ DRIVE



0 50 100
SCALE IN FEET

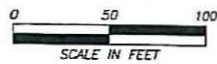
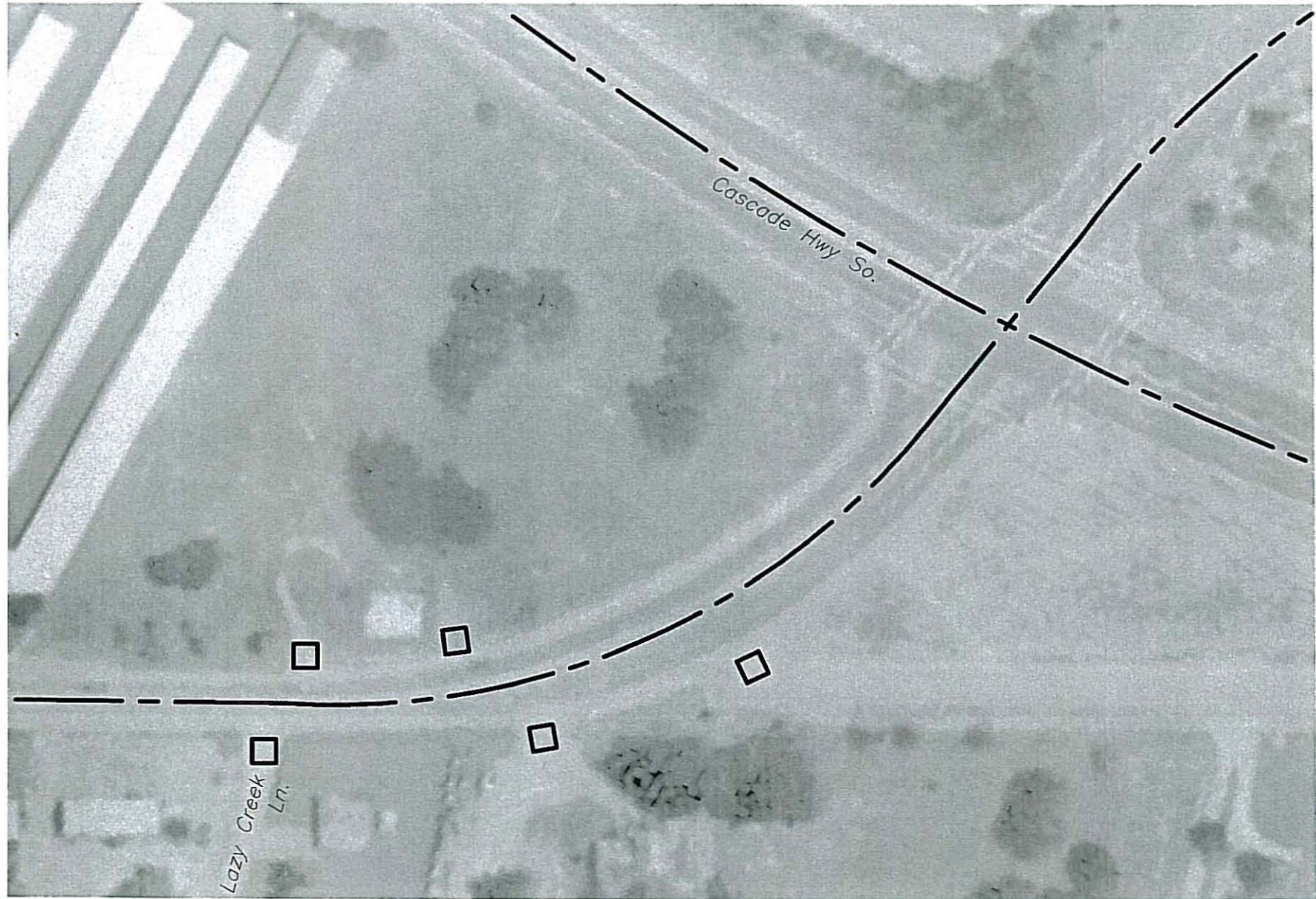
| LEGEND | |
|--------|---|
| | EXISTING ACCESS LOCATION |
| | PROPOSED ACCESS CLOSURE AND/OR MODIFICATION |
| | PROPOSED MEDIAN TREATMENT |
| TEXT → | SYSTEM WIDE CIRCULATION IMPROVEMENT |



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Corridor Safety and Enhancement Plan

Figure Number
2-D
Project Number
1077A



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May 2001

Corridor Safety and
Enhancement Plan

Figure Number

2-E

Project Number

1077A

- A-6. Hilltop Community Church (592 Molalla Avenue, Tax Lot 22E32CC08300) – eliminate the two redundant northern-most curb cuts on the west side of Molalla Avenue, the parcel already has one access point onto Molalla Avenue. The removal of these two curb cuts will allow for the addition of four to five more parking spaces and safer, more efficient on-site circulation.
- A-7. Hillside Terrace Apartments (Tax Lot 22E32CC08901) – eliminate redundant (southern-most) curb cut on the east side of Molalla Avenue. The parcel already has one access point onto Molalla Avenue. Removal on this cut curb will allow for the provision of more parking spaces and safer, more efficient on-site circulation.
- A-8. Oregon City Floor Covering (812 Molalla Avenue, Tax Lot 32E05BB06400) – eliminate redundant (northern-most) curb cut on the west side of Molalla Avenue (just north of Mountain View Street). The parcel already has one access point onto Molalla Avenue.
- A-9. Chevron Service Station (860 Molalla Avenue, Tax Lot 32E05BB06300) – eliminate redundant (northern-most) curb cut on the west side of Molalla Avenue and provide a crossover easement with the parcel to the north. The parcel already has one access point onto Molalla Avenue.
- A-10. Valley Glass Company (875 Molalla Avenue, Tax Lot 32E05BB04600) – eliminate redundant (northern-most) curb cut on the east side of Molalla Avenue (just south of Barclay Hills Drive). The parcel already has one access point onto Molalla Avenue and alternative access to/from Barclay Hills Drive.
- A-11. 76 Service Station (896 Molalla Avenue, Tax Lot 32E05BB06100) – eliminate redundant (southern-most) curb cut on the west side of Molalla Avenue. The parcel already has one access point onto Molalla Avenue.
- A-12. New China Restaurant (904 Molalla Avenue, Tax Lot 32E05BC00700) – eliminate redundant (southern-most) curb cut on the west side on Molalla Avenue. The property already has one access point onto Molalla Avenue. In addition, by removing one concrete parking block, the access, on-site circulation and parking of this parcel can be consolidated with the Pioneer Plaza property to the south (see System-Wide Circulation Improvement C-1).
- A-13. American General Finance (901 Molalla Avenue, Tax Lot 32E05BA03800) and Carousel Cleaners and Laundry (927 Molalla Avenue, Tax Lot 32E05BA04100) – remove redundant curb cuts on the east side of Molalla Avenue (just south of Hilda Street and southern-most access). These two properties can consolidate access to one shared location.
- A-14. Mt. View Professional Center (1001 Molalla Avenue, Tax Lot 32E05BD00102) – eliminate redundant northern-most curb cuts on the east side of Molalla Avenue. The parcel already has two access points onto Molalla Avenue.
- A-15. Private Residences (Tax Lots 32E05BC00100 and 32E05BC01202) – consolidate the two curb cuts for the private residences on the west side of Molalla Avenue (north of May Street) into one shared access point.

- A-16. Madeira-Coopers Insurance (956 Molalla Avenue, 32E05BC01400) – eliminate redundant (southern-most) curb cut on the west side of Molalla Avenue (just north of May Street). The parcel already has one access point onto Molalla Avenue and alternate access via May Street.
- A-17. Hilltop Tax Service (1020-A Molalla Avenue, Tax Lot 32E05BC02000) – remove redundant (northern-most) curb cut on the west side of Molalla Avenue. The parcel already has one access point onto Molalla Avenue. In addition, access to this property could be consolidated with that for the parcel directly to the south (Towne Pump Service Station).
- A-18. Elliott Professional Building (1017 Molalla Avenue, Tax Lot 32E05BD01100) – eliminate curb cut on the east side of Molalla Avenue (just south of Harris Lane). Alternative access to the parcel is already available from Harris Lane.
- A-19. Vacant Lot (1101 Molalla Avenue, Tax Lot 32E05BD01200) – eliminate two unused curb cuts on the east side of Molalla Avenue (just north of Buckner Lane). Alternative access is available via Buckner Lane.
- A-20. Bank of the West (1301 Molalla Avenue, Tax Lot 32E05DB02200) – eliminate curb cut on the east side of Molalla Avenue (just south of Fox Lane). Alternative access for the parcel is already provided via Fox Lane.
- A-21. Dale’s Auto Wrecking (1367 Molalla Avenue, Tax Lot 32E05DB03300) – eliminate redundant (northern-most) curb cut on the east side of Molalla Avenue. The property already has one access point onto Molalla Avenue. Eventually both Molalla Avenue access points to this property could be replaced by a crossover easement connection to the Hilltop Mall traffic signal.
- A-22. Marquis Care at Oregon City (1680 Molalla Avenue, Tax Lot 32E05C00301) – due to the close proximity to the Beaver Creek Road intersection, modify the northern-most curb cut on the west side of Molalla Avenue (just south of Beaver Creek Road) to a right-in/right-out only access.
- A-23. Mountain View Apartments (1840 Molalla Avenue, Tax Lot 32E05C00400) – eliminate curb cut on the west side of Molalla Avenue (north of Clairmont Way). Alternative access for the apartment complex can be provided from Clairmont Way by removing an existing fence.
- A-24. Joanne Fabrics (1842 Molalla Avenue, Tax Lot 32E08AB00100) and Burgerville (1900 Molalla Avenue, Tax Lot 32E08AB00900) – eliminate redundant (southern-most) curb cut on the west side of Molalla Avenue (north of Gaffney Lane). Joanne Fabrics already has one access point onto Molalla Avenue and Burgerville has alternative access off of Gaffney Lane.
- A-25. Perfect Pizza (2262 Molalla Avenue)/Maximus Salon (2258 Molalla Avenue)/Walsh Insurance (2264 Molalla Avenue) (Tax Lot 32E08AB01000) – eliminate redundant (northern-most) curb cut on the west side of Molalla Avenue (south of Gaffney Lane). The parcel already has one access point onto Molalla Avenue.
- A-26. Leong’s Restaurant (19212 Molalla Avenue, Tax Lot 32E09B01502) – eliminate curb cut on the east side of Molalla Avenue (just south of Fir Street). Alternative

access to this parcel is already provided via Fir Street. In addition, access to this parcel can be provided via the existing access point for the property directly to the south (Wilco).

- A-27. Followers of Christ Church (19394 Molalla Avenue, Tax Lots 32E08A02900 and 32E08A03000) – realign southern-most curb cut on the east side of Molalla Avenue to be across from Char Diaz Drive.

Median Treatments

The Molalla Avenue Corridor Safety and Enhancement Plan identified opportunities to construct median treatments along the following segments of the Molalla Avenue corridor. Unless otherwise specified, the median treatments will be raised and landscaped, constructed to the standards and specifications outlined in the Molalla Avenue Bikeway and Boulevard Improvements Plan. With each proposed median treatment identified, any associated access modifications that will be required are also outlined. The proposed median treatments along the corridor are identified by a green marking in Figures 2A through 2E.

- M-1. North of Division Street to Willamette Street (250 feet) – a raised, landscaped median with a 100-foot southbound left-turn lane at Willamette Street.
- M-2. Willamette Street to Roosevelt Street (425 feet) – a raised, landscaped median with a 100-foot northbound left-turn lane at Willamette Street and a 100-foot southbound left-turn lane at Roosevelt Street. As part of this median treatment access to Logus Street from Molalla Avenue will be converted to right-in/right-out only. The residential properties along Logus Street will have alternative full-access to Molalla Avenue at both the Willamette Street and Roosevelt Street intersections.
- M-3. South of the Hillside Terrace Apartments to North Pleasant Avenue (400 feet) – a raised, landscaped median. As part of this median treatment the eastbound left-turn movement at the Molalla Avenue/North Pleasant Avenue intersection (i.e. eastbound Pleasant Avenue to northbound Molalla Avenue) will be prohibited. Alternative northbound Molalla Avenue access is provided for Pleasant Avenue at the Molalla Avenue/South Pleasant Avenue intersection.
- M-4. Warner Milne Road to Hilltop Mall Access (400 feet) – a raised, landscaped median with a 250-foot northbound left-turn lane at Warner-Milne Road. The southbound left-turn lane storage requirements at the Hilltop Mall access will be determined upon the completion of the fourth leg of the Molalla Avenue/Hilltop Mall intersection.
- M-5. Hilltop Mall Access to Beaver Creek Road (475 feet) – a raised, landscaped median with a 100-foot northbound left-turn lane at the Hilltop Mall access and a 325-foot southbound left-turn lane at Beaver Creek Road.
- M-6. Beaver Creek Road to 125-foot South – raised, 2-foot curb median. As part of this median treatment the northern-most access to Marquis Care at Oregon City will be converted to a right-in/right-out only driveway. Alternative full-access to Molalla Avenue will be maintained at the parcels southern curb cut access.

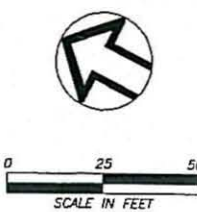
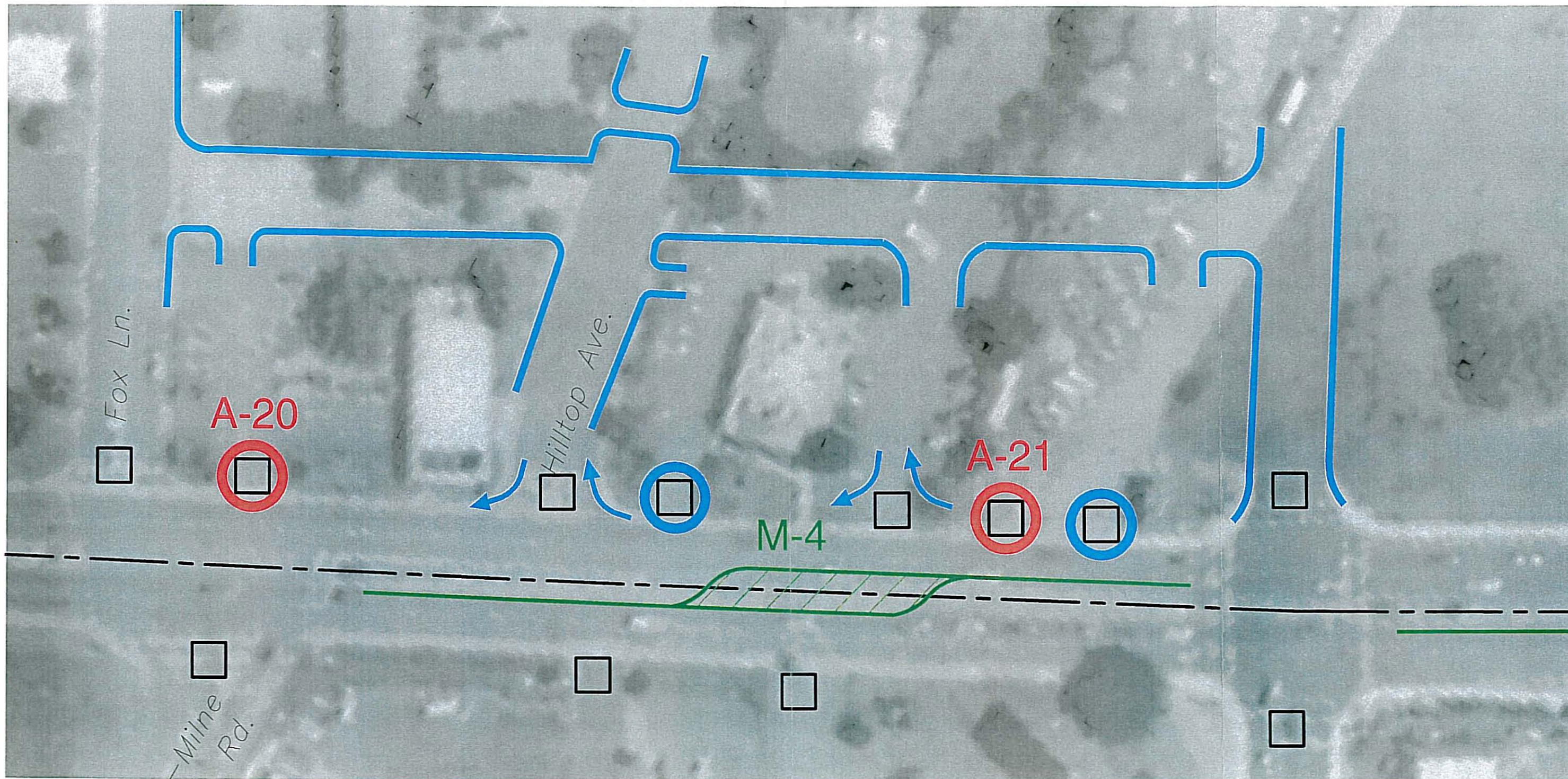
- M-7. South Ridge Center Access to Clairmont Way (400 feet) – a raised, landscaped median with a 100-foot northbound left-turn lane at the South Ridge Center access and a 100-foot southbound left-turn lane at Clairmont Way. As part of this median treatment the existing access to the Mountain View Apartments would be eliminated. The apartment complex would be provided with alternate access via Clairmont Way.
- M-8. Clairmont Way to South Gaffney Lane (400 feet) – a raised, landscaped median with a 125-foot northbound left-turn lane at Clairmont Way and a 175-foot southbound left-turn lane at South Gaffney Lane.




System Wide Circulation Improvements

An additional design, planning, and operational concern considered through this process was the development of viable, efficient on-site and adjacent corridor circulation patterns consistent with and complementary to the proposed access management and enhancement plan. In addition to enforcing safe and efficient spacing and location of driveways, a key component of successful access efficiency implementation includes effectively designing driveways and on-site circulation patterns for adjacent properties and land uses.

In addition to the driveway consolidation and median treatment improvements identified above, the Molalla Avenue Corridor Safety and Enhancement Plan also identified opportunities for system-wide circulation improvements, outlined below, to complement the plan. The proposed system-wide circulation improvements are identified with blue marking in Figures 2A through 2E and Figure 3.

- C-1. Remove parking block between the New China Restaurant and the Pioneer Plaza property to the south – this will allow for the consolidation of the access points between the two properties, shared parking, and more efficient on-site circulation for both parcels.
- C-2. Develop crossover easements on the east side of the Bank of the West, Wendy's, and Dale's Auto Wrecking parcels to provide a back access road between Fox Lane and the Hilltop Mall signal – this will allow for the provision of a median treatment between Warner-Milne Road and Hilltop Mall (median treatment M-4); the elimination of the two southern-most curb cuts on the east side of Molalla Avenue just north of the Hilltop Mall signal; and the elimination of the curb cut on the eastside of Molalla Avenue just south of Hilltop Avenue. Alternative access to the three parcels would be provided via the two signalized intersections of Warner-Milne Road-Fox Lane/Molalla Avenue and Hilltop Mall/Molalla Avenue, and a connecting back access roadway developed from shared crossover easements. A conceptual system circulation plan for this improvement opportunity is illustrated in Figure 3.
- C-3. Remove the existing fence behind the Mountain View Apartments – this will allow for the closure of the complex's access onto Molalla Avenue and provide alternative access via Clairmont Way.



| LEGEND | |
|---|---|
|  | EXISTING ACCESS LOCATION |
|  | PROPOSED ACCESS CLOSURE AND/OR MODIFICATION |
|  | PROPOSED MEDIAN TREATMENT |
| TEXT → | SYSTEM WIDE CIRCULATION IMPROVEMENT |



Molalla Avenue Improvement Project
Oregon City, Oregon May 2001

Off-System Circulation Opportunity
Fox Lane to Hilltop Mall

| | |
|----------------|-------|
| Figure Number | 3 |
| Project Number | 1077A |

ACCESS SPACING STANDARDS

The final section of this technical memorandum summarizes the proposed Access Spacing Standards that will be adopted with the new City of Oregon City Street Design Standards. As previously discussed, maintaining a safe and efficient spacing and location of access points is a key component of successful access efficiency implementation. Driveways and local street access points should be placed appropriately to limit potential conflicting turning movements, weaving maneuvers over short distances, and to provide for safe and efficient on-site circulation.

Once adopted, the proposed City of Oregon City Access Spacing Standards will specify policies and standards that all future development (zone changes, comprehensive plan amendments, city projects, redevelopment, and/or new development) along Molalla Avenue will be required to meet. The existing driveway and public street intersection spacing locations would not be required to meet the proposed spacing standards immediately. However, existing permitted connections, not conforming to the design goals and objectives of the roadway, will be upgraded as circumstances permit and during redevelopment. At any time, an approach road may need to be modified and improved due to an identified safety problem or a capacity issues that exists or becomes apparent.

In certain instances, access exceptions may be provided to properties whose frontage, topography, or location otherwise preclude issuance of a conforming access permit and would otherwise have no reasonable access or cannot obtain reasonable alternate access to the public street system. In such situations, a conditional access permit may be issued by the City of Oregon City for a single connection to a property that cannot be accessed in a manner that is consistent with the spacing standards. The permit may carry a condition that the access may be closed or relocated at such a time that reasonable alternative access becomes available to a local public street. Conditions of approval may also require a given land owner to work in cooperation with adjacent land owners to provide joint or shared access points, front and/or rear cross-over easements, or a rear access upon future redevelopment. Under special circumstances, the City of Oregon City may purchase property in order to prevent safety conflicts.